

SMTA Space Coast Chapter EXPO Solder Challenge Application

January 18, 2018



Please provide the below information

Last Name	
First Name	
Employer	
Contact Phone Number	
Email	

Select your 1st choice and 2nd choice **ONLY** from the list below by checking the appropriate box. “We cannot guarantee these choices but we will make every effort to provide you with your preferred equipment. If no selection is made, equipment will be provided based solely on availability.

	1 st Choice	2 nd Choice
Metcal		
Hakko		
JBC		

For those of you that have certifications please provide the following information by checking the appropriate box about current and/or previous certifications held. **This information is strictly voluntary.**

Certification	Currently Certified	Previously Certified
J-STD-001 Solder (or company equivalent)		
IPC-A-610 (or company equivalent)		
IPC-7711/7721 (or company equivalent)		
OTHER:		

Available Heats: Heat times may vary depending on total number of contestants. “Select which heat you would like to participate in as the openings get filled you will be notified if your choice has a conflict”

Heat 1 1:00PM	
Heat 2 1:20PM	
Heat 3 1:40PM	
Heat 4 2:00PM	

Heat 5 2:20PM	
Heat 6 2:40PM	
Heat 7 3:00PM	
Heat 8 3:20PM	

Email this completed form to Michael Newman michael.newman@harris.com

SMTA 2018 Solder Challenge Rules, Heats

The goal of this challenge is to successfully solder as many joints in the order prescribed below starting with R5 and ending with U5. All joints must meet at a minimum Class 1 IPC-610 criteria to be considered a good joint. (There are a total of 200 joints) The person with the most, good joints wins the heat. This is a **Tin Lead** soldering event. Ties will be broken by inspecting the solder joints to the next higher levels (Class 2 and Class 3).

1. The Solder Challenge is a timed event with **5 minutes** of actual soldering time.
2. Two soldering irons may be used.
3. The kits will be in boxes serialized and will contain 1 serialized PWB enough parts for 2 boards. (In case you drop one)
4. You will have **10 minutes** to turn on soldering irons, adjust scope and lay out your parts and tools. You can open the parts containers and can bend or form any leads and arrange the parts in build order not on the PWB. No component lead trimming or tinning or PWB pad tinning is allowed. You can put the spacers on Q1, Q2 and C1, C2. **Do Not Touch the actual soldering iron wand until the heat starts.**
5. Build order is listed below. It starts with **R5** and ends at **U4**.
6. Any component missed, out of order will disqualify any other part after the missed part. In other words if you skip Q1 and solder Q2, Q2 as well as any other part after it will not be counted.
7. Any lead not trimmed will not count.
8. Any lead not soldered will not count.

Build Order	Ref Des	Part Number	Description	Qty	Qty Placements
1	R5,	1206R	1206SMR	1	1
2	R6	1206R	1206SMR	1	1
3	CR4	SOD80	SOD80	1	1
4	CR3,	SOD80	SOD80	1	1
5	C4	1206C	1206SMC	1	1
6	C3	1206C	1206SMC	1	1
7	R4	0805R	0805SMR	1	1
8	R3,	0805R	0805SMR	1	1
9	Q1, SQ1	TO5, TO5 Spacer	TO5	2	1
10	Q2, SQ2	TO5, TO5 Spacer		2	1
11	R1,	1/4-W-AR	1/4-W-AR	1	1
12	R2	1/4-W-AR		1	1
13	CR1,	DO35	DO35	1	1
14	CR2	DO35		1	1
15	U1,	DIP16	DIP16	1	1
16	U2	DIP16	DIP16	1	1
17	C1, SC1,	CK05, CK05Spacer	CK05, Spacer-CK05	2	1
18	C2, SC2	CK05, CK05Spacer	CK05, Spacer-CK05	2	1
19	U3	SO14	SO14GT-3.8mm	1	1
20	U4	QFP100-14x20mm	QFP100-14x20mm-.65mm-3.2	1	1
21	U5	PLCC20	PLCC20	1	1

